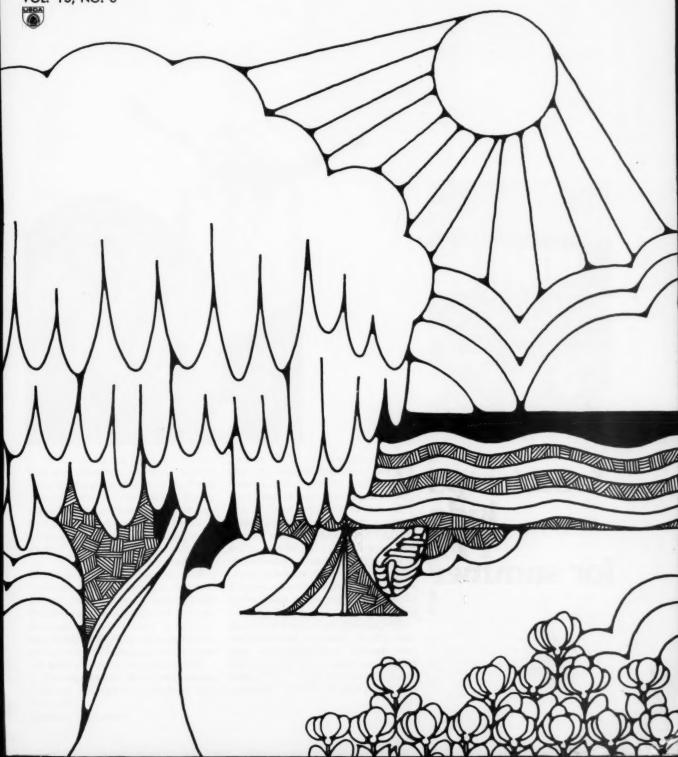
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agricultural marketing







food keeps kids FIT for summer

THE U.S. DEPARTMENT OF Agriculture will again help summer camps with donated foods.

To improve the nutritional value of summer camp feeding operations, USDA's Food and Nutrition Service is making available the following: dry beans, bulgur (wheat), butter, cornmeal, corn grits, flour, nonfat dry milk, rolled oats, rice, rolled wheat, salad oil, vegetable shortening, and canned chopped meat.

The availability of donated foods varies from State to State because most donated foods released to summer camps come from school inventories. Taking this into account, some camps may also get canned whole kernel corn, canned applesauce, canned pears, canned plums, dry split peas, peanut butter, raisins, tomato paste, and frozen concentrate orange juice.

Camp directors may find out if these foods are available to them by asking their State agency, which handles the donated foods.

Like schools in regular session, any nonprofit summer camp for children through high school age is eligible for donated foods, which help a good deal to bolster their shoestring budgets. This year some 1,300,000 children are expected to attend 7,200 such camps.

The quantity of foods available depends upon use of the camps and, in some instances, the amounts available





from USDA. Camps may accept lesser amounts that meet their needs. USDA's donated foods are delivered free to central locations in the States. Some States may have a small service charge to defray State costs.

Summer camps participating in this and all FNS programs comply with the Civil Rights Act of 1964 and USDA regulations which state that "no person in the United States shall, on the ground of race, color, or national origin, be excluded from participation in, or be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance."

For help in planning their summer

feeding operations, summer camps may purchase the following publications from the Superintendent of Documents, Government Printing Office, Washington, D.C. 20402:

PA-270, Food Buying Guide for Type A School Lunches—\$1.25;

PA-403, Food Storage Guide for Schools and Institutions—\$.25;

PA-631, Quantity Recipes for Type A School Lunches—\$4.00.

For more information on donated foods for summer camps, write: Commodity Distribution Division, Food and Nutrition Service, U.S. Department of Agriculture, Washington, D.C. 20250. Please include your ZIP code.

one day in the District



HOT, NOURISHING MEALS in the morning along with wholesome and nutritious lunches and suppers—this is what some students are receiving in the District of Columbia's School District No. 2.

At Harrison Elementary School in Northwest Washington, a hot cereal has been added to the School Breakfast Program even though Harrison, like many older schools, does not have food-preparation facilities. The Quaker Oats Company, using privatesector "know-how" to feed children, has donated packets of instant oatmeal to schools in low-income areas to test the acceptability and ease of service of this convenience food. Aides add hot water to the contents of the packets. These oatmeals are flavorful, as well as convenient. They are presweetened, and come in the flavors of raisins and spice, maple-brown sugar, and apples and cinnamon.

The company is also going to test a "bowl-pak" that may be more convenient; the cereal will be packaged in the same large box with 48 disposable bowls and spoons. Along with the hot cereal, the children are served orange juice, fruit, and milk, which gives them a nutritious meal before they start their school day. The program is popular with the children—about 275 of them eat breakfast every day at Harrison School.

"This is a fine program," says the principal of the school, Mr. Frederick Couzzens. "We can see that the child functions much better in school when his day begins with a wholesome breakfast."

Another interesting test is being conducted by the District's School Food Service Director, Julius Jacobs, at two junior highs and an elementary school. After early-morning physical





fitness programs followed by showers, a complete hot breakfast is served to students at Stewart and Terrell Junior High Schools and Ludlow-Taylor Elementary School.

At Lincoln Junior High School, a complete, well-equipped, and highly efficient central kitchen is the nucleus of a satellite feeding program. Mrs. Helena Holly, supervisor at the school, and her staff prepare 874 hot lunch kits daily to be sent to the four Washington schools: Morgan Elementary, Morgan Elementary, Morgan Elementary, and Webster Girls' Junior-Senior High School.

Packed into separate and insulated individually covered trays, these lunches remain hot for 2 hours. For added insulation and protection, the kits are put into large chests which are made of foam-plastic, each chest holding 30 kits. The chests are then delivered by trucks to the satellite schools. A typical hot lunch includes a veal cutlet, string beans, bread, cookies or apple, and milk.

Many of the same students who eat breakfast and lunch at Harrison Elementary School get supper in the nonschool food service program at the St. Augustana Church in the same area. The hot dinner may consist of liver, turnips, rice, sliced pears, and milk. Mrs. Mamie Bennett, coordinator of the local program, receives some help from Roosevelt and Cardoza High School girls in Washington.

With impressive gains and encouraging results, the School Food Service Division is feeding as many children as possible, by making full use of the available child nutrition programs of USDA's Food and Nutrition Service, including the more recent breakfast program, the lunch program, and the non-school food program.



TEW AND MORE SPECIFIC instructions issued in February by USDA's Food and Nutrition Service are reinforcing the national objective to insure that all needy children are provided free or reduced-priced meals on a consistent basis within each State. The instructions also provide that the anonymity of children receiving this special help be protected.

The new instructions issued by State educational agencies and regional FNS offices state that family size and income scales be used as minimum criteria by local school authorities and service institutions for deciding which children get free and reduced-priced meals. The criteria are to be applied uniformly throughout the State, except where variations are justified by local economic conditions.

The instructions require all local school authorities and service institutions to issue a policy statement spelling out the family size and income scale to be used in determining eligibility. Taken into account are such factors as the number of children in the family attending school, unusual expenses, illness, and seasonal unemployment.

To protect the anonymity of needy children, the school policy must also cover the methods of collecting children's payments and accounting for the free and reduced-priced meals.

The instructions also set minimum requirements for public announcement, at least twice a year, of the local policy. The announcements are to include information on how to apply for free or reduced-priced meals, the income and family size scale, information on where the policy may be reviewed, and the titles and addresses of officials to whom appeal can be made. The policy information is to be supplied to mass media, sent home in letters to parents, and provided to local welfare and private charitable agencies.

The new instructions strengthen and expand the procedures and standards announced in October 1968, to guide local schools in providing free or reduced-priced meals to needy children on a uniform basis within the same school districts or jurisdictions.

Schools and service institutions must have an acceptable policy statement on file in the State education agency—or the regional FNS office in instances where some of the child nutrition programs are administered directly in private schools and certain non-school situations—at least 2 weeks before service of meals for which reimbursement will be claimed under the National School Lunch Program, School Breakfast Program, or the Special Food Service Program for Children.

Plentiful foods for JUNE

MILK AND HONEY WILL be plentiful throughout the land in June, according to the Plentiful Foods list that the U.S. Department of Agriculture publishes monthly.

Milk and dairy products will share the feature spotlight with honey, since milk production will be at its peak in June. The honeybees last year scored a record crop of 283 million pounds. Chickens have been busy, too, with eggs also listed as plentiful. Egg production this June is expected to be 3 percent above a year ago.

And canned applesauce, a food that adds flavor delight to meals, is just waiting to be cinnamoned up and put on tables across the country. Supplies this year are $2\frac{1}{2}$ million cases more than a year ago.



IN ITS CAMPAIGN TO end hunger in America, the U.S. Department of Agriculture is getting some help from the U.S. mail. USDA's Food and Nutrition Service encourages State agencies to mail food stamps to participating households.

Here's how it works, in the 281 Food Stamp areas that have so far undertaken mail issuance.

Qualified food stamp users get a money order or cashier's check for the amount of purchase required and mail it to the County or city issuance office. Upon receipt of the money, the issuance office mails the food stamps directly to the household.

The idea of mail issuance is about as old as the present-day food stamp program itself. Detroit, Michigan, was the first to try it, during the early 1960's when the food stamp method of helping low-income people was still in its experimental phase. Later, Alaska, Illinois, and Washington used the mails to deliver food stamps, largely in rural and isolated areas.

There was no rush to use the mails to distribute food stamps, however, because the State agencies did not want the risk of loss, if any. In 1968, the food stamp regulations were amended and the Food and Nutrition Service assumed responsibility for loss if the State agency mailed the food stamps according to FNS instructions.

Since the amendment, 19 States with 281 projects have started mailing food stamps to eligible households.

Currently, the 19 participating States are Alaska, California, Colorado, Florida, Illinois, Maryland, Minnesota, Missouri, Montana, North Carolina, North Dakota, Oregon, South Carolina, South Dakota, Tennessee, Texas, Virginia, Washington, and Wisconsin.

There have been very few losses of food stamps in the mails thus far. Mail issuance helps the elderly, the disabled, those who live long distances from the issuance offices, and those who cannot go to the office because they cannot get time off from jobs.

Food stamps do not have to be sent by certified mail. They can be sent first-class. The cost to State agencies or project areas averages about 25¢ per recipient, a small price to pay for the big help to recipients.

Will you be eating CSM?

THE U.S. DEPARTMENT OF Agriculture has just completed a study to test the acceptability of a blended food called CSM.

Four Counties took part in the study—Chambers County, Ala., Lake County, Fla., and Cumberland and Vance Counties, N.C.

Although this nutritious, proteinrich food has been tested in other countries to help end hunger and malnutrition, this is the first time that USDA's Food and Nutrition Service has offered CSM to participants in its Commodity Distribution Program in the United States.

CSM is blended from corn meal, soy flour, and nonfat dry milk with added vitamins and minerals.

The test started last February, and continued for 4 months.

FNS, in cooperation with industry and the Extension Service, set up an educational program in three of the four counties to show the recipients how to use the cereal food product. The industry supplied the 2-pound sample box of CSM. They also supplied recipe flyers and instructional materials, for the Extension Service to use in its educational program.

Educational kits were provided for those test counties with nutrition aide programs. These kits contain information on the composition of CSM, the history of CSM, and a flip chart giving important facts about the product in picture and narrative form.

Three of the counties—Cumberland County, N.C., Lake County, Fla., and Chambers County, Ala.—have nutrition aide programs. The fourth, Vance County, N.C., does not, and is the "control county" to check the effectiveness of the educational effort. Recipients in Vance County received CSM recipes, but not the educational assistance of the nutrition aides.

Now that the test period is completed, a survey of the users is being taken. The results will be tabulated and evaluated to obtain data on CSM acceptability—when accompanied by an educational program, and not.



Young Chefs Cook Out On Fogg Family Farm

It's a picnic on the farm and living in the great outdoors for needy children from the city of Bangor, Maine. For the third summer a group of about 40 youngsters from the city will be coming to the farm daily, cooking over an open fire, and enjoying the long, warm days in the outdoors.

The day-camp program is sponsored locally by the city's Parks and Recreation Department with food help from the U.S. Department of Agriculture's Special Food Service Program for Children.

The children are the guests of Mr. and Mrs. Walter Constantine, owners of the Old Fogg Farm near Bangor. The farm is ready-made as a summer day camp. Picnic tables, fireplaces and recreational facilities are set up, including a swimming hole.

Half the fun for the children is in preparing the picnic meal. The older ones portion out the food to be wrapped in aluminum foil and cooked over the fire. About 30 minutes later, they're ready to eat. And it's a rare day when any food is left over.

The meals served on the farm vary daily. They all meet the same Food and Nutrition Service standards that are used for the regular school lunch program.

The lunches have made a definite impact on the children. Mrs. Constantine commented: "We know that these highly nutritious meals are benefiting the children physically. However, it's truly amazing to see how their mental attitude has changed. Their new-found enthusiasm has been a great source of satisfaction to us." Mrs. Constantine is a special education instructor in the Bangor school system. As such, she works with many of these children the year round.

Nationally, USDA's Special Food Service Program helped provide summer lunches or between-meal nutrition for some 300,000 youngsters in 1969 for the first time. FNS regional program administrators began early in 1970 to plan for this summer's feeding program. They envision an even bigger participation than last summer.

Food service in conjunction with summer recreation programs fills a real need, since most of the youngsters come from needy families in low-income neighborhoods. Consequently, they receive the lunch and/or between-meal foods free or at a reduced price. Some food items are donated by USDA for use in preparation of the meals, in addition to cash reimbursements of a maximum of 15¢ for each breakfast, 30¢ for each lunch or supper, and 10¢ for between-meal snacks.

USDA's donated foods are widely used in the operation of summer recreation programs, especially the sandwich type items including peanut

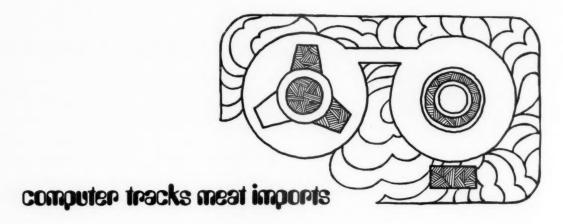
butter, canned luncheon meat, and butter. In some instances bread and sandwich spreads are donated by private companies.

Among the several cities sponsoring in-town summer programs, the District of Columbia was one of the most extensive. They began early in June shortly after the school session ended, and operated the feeding program until late in August, 2 weeks before school started again. At the high point, nearly 50,000 youngsters enjoyed a nutritious lunch at school cafeterias near the playgrounds.

Public and nonprofit private institutions participating in the program also include year-round child-care centers, settlement houses, and recreation centers that provide day care for children from low-income areas, or from areas with many working mothers.

In the summer, day camps like the Fogg Family Farm and other daytime recreation programs join in the Special Food Service Program to help fill the nutrition gap when school is out.

For more information about the Special Food Service Program for Children, write to the appropriate State department of education, the nearest USDA Regional Food and Nutrition Service Office, or the Food and Nutrition Service, Child Nutrition Division, USDA, Washington, D. C. 20250.



By Dale Dunham

ROM NEW YORK TO LOS Angeles, Boston to New Orleans, meat products enter the nation every day.

The task of inspecting these millions of pounds of meat falls on the U.S. Department of Agriculture's Consumer and Marketing Service. At each port of entry, Federal food inspectors check the lots of imported meat to make sure they're safe to eat. And in Washington, D.C., a computer keeps track of all their inspection data.

Inspecting imported meat is only one part of USDA's total inspection program. On the domestic scene, animals are thoroughly inspected before and after slaughter. Processed products, such as hot dogs and frozen dinners, are carefully checked for wholesomeness and label accuracy. So that imported meat will be as wholesome as domestic products, foreign countries must have a meat inspection program equal to ours.

Because many factors determine the acceptability of frozen boneless meat, the computer records specific information on all import rejections. These rejections are broken down into country of origin, type of product, and number of kinds of defects.

Using a similar computer program, officials can estimate, before a boat is unloaded, whether containers of meat from a plant in a country should pass inspection without many defects. This estimate is based on the plant's past performance, firmly recorded in the computer's memory bank and updated daily.

A rating system has been organized for certain import inspection programs. Plants in foreign countries are rated for either tightened, normal, or reduced inspection. When a particular plant consistently shows a high level of defects, the computer puts it on tightened inspection. Inspectors are then advised to apply more stringent inspection of the plant's products when they enter this country. Conversely, if a plant's products are consistently acceptable at all ports, with a low level of defects, inspection surveillance may be reduced.

Each day the computer updates the file so plants can be shifted between tightened, normal and reduced status when necessary. This information is relayed to the inspectors who can then use their time more efficiently to provide increased protection for consumers.

Computer programs are also being developed for the inspection of meat products made in this country. Some plants are now being reviewed by this system to check the limits of 30 percent fat and ten percent added water for cooked sausages.

If a plant is consistently within the limits, it needs only limited surveillance. However, if a plant has trouble with the limits, inspectors check more closely for fat and added water and retain those products with too much. USDA statistics show that the average fat content of cooked sausages has been reduced to 28.5 percent, and added water is well within its limit of 10 percent.

Federal inspectors protect us from adulterated food—that's their job. And uniform inspection criteria are important to that job. With all the ports, all the different products, and the dozens of import inspectors, discrepancies sometimes develop. However, the problems with import inspection are typical of the overall

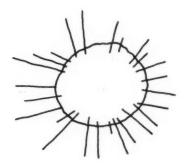
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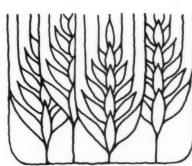
The inspectors at each port provide data on the number and kinds of defects in a product, country of origin, and plant number. Results from each port are then summarized, at the push of a button, for an analysis of the rejections. USDA can determine if any one inspection station has rejected a smaller proportion of a particular product than a station getting the same type of product at a different port.

Many times the computer can predict a non-uniformity problem before it actually develops. Alleviating a potential problem through the use of a computer helps USDA increase efficiency. It also helps you get the best meat products from foreign countries.

This is truly the age of computers. They help run everything from our space program to figuring our pay checks. In food inspection, they will be doing more in the future—to protect us from adulterated products and to increase the efficiency of the Federal food inspectors.

The author is a staff officer, Planning Branch, Processed Food Inspection Division, C&MS, USDA.





little report helps save BIG market

By James W. Coddington

NYWHERE ELSE THE SUMMER rains probably would have been welcome. But for wheat growers in Washington, Oregon, and Idaho, the unseasonal rains which danced lazily across their rolling fields in August 1968 were a stroke of bad luck, a near disaster.

No one realized it then, but large quantities of wheat—perhaps several million bushels—began to germinate in the warm, moist fields or in the grain storage elevators after harvest. Starch in the kernels started to convert to sugar, causing unseen "sprout damage."

Some of the precious "golden" cargo (classed as white wheat) with its hidden damage arrived in Japan in late 1968. Shortly after that, Japanese noodle makers discovered that something was very wrong. For no obvious reason noodles made from the wheat broke up on the drying racks.

For a while it looked as if the United States was going to lose a major wheat customer—at a cost of \$135-140 million annually! As it turned out, Japan did suspend wheat trade with the United States for two months beginning in late 1968—a move which imperiled the sale of 10-12 million bushels of wheat worth approximately \$17 million.

Wheat growers, dealers, exporters, and millers from the tri-State Pacific growing area banded together and approached several U.S. Department of Agriculture agencies, including the Consumer and Marketing Service, for help in finding a solution so that Japan would return to the U.S. market. Together, industry and Government representatives tackled the problem. Everyone involved was struck by how little was known about the wheat crop.

After months of discussion, the wheat trade, in cooperation with C&MS' Grain Division, the Foreign Agricultural Service, and the State Departments of Agriculture in the tri-State area, developed the settlement that finally led Japan to resume buying U.S. wheat. Representatives from C&MS' Grain Division and other USDA agencies traveled to Japan to study the problem first-hand. There, they ran tests on the damaged wheat to find the cause of its poor baking qualities.

Then in the spring of 1969, USDA and industry leaders agreed to try a new system of testing wheat quality and reporting the results as soon as the wheat was harvested so that never again would wheat growers be caught with so little information about the quality of a newly harvested crop.

Under the proposed system, samples of wheat for testing would be taken during the harvest season as the truckloads of wheat arrived from farms at country elevators in Washington, Oregon, and Idaho. Then, through its market news service, C&MS' Grain Division would issue the results in a series of weekly wheat quality reports.

C&MS' Grain Division, cooperating with the trade, and the State Departments of Agriculture in Washington, Oregon and Idaho, worked up the logistics of the experimental testing and reporting system:

 Farmers would truck their harvested wheat to country elevators as they had done in the past.

• Samples of wheat would be taken at more than 100 selected country elevators throughout the wheat producing area and sent to grain inspection agencies, where C&MS-licensed inspectors would determine the Federal grade. The results would be forwarded to C&MS market news offices in Portland for compilation.

 A portion of all samples would be sent to State or commercial grain testing laboratories, for tests for protein content and baking properties. These results would also be forwarded to the market news office in Portland for compilation.

 All the information would then be tabulated and the data included in a weekly report to the grain industry.

The first report was issued August 1, 1969, a week after the harvest season had begun. Exporters and others quickly learned which wheat-growing areas had the most suitable qualities of wheat for the Japanese market—and thus were able to assemble the wheat for export shipment.

The new system worked and, in fact, exports of U.S. wheat to Japan set a new record of 82.6 million bushels during the Japanese fiscal year ending March 30. Wheat growers will use the service again this year. Moreover, C&MS' Grain Division is now considering the possibility of expanding this testing and reporting system to other wheat-growing areas in the country and possibly to other crops. □

The author is Chief, Program Analysis Group, Grain Division, C&MS, USDA.



MARKET NEWS HELPS LATIN AMERICA

Many of the food markets in Peru are open-air displays of locally grown products. Booths like this—run by the Indians who raise the food—are common. This type of market causes unique problems in setting up market reporting systems.

E IN THE UNITED STATES take market news for granted.

Anyone can turn on his radio at 6 a.m. and get the latest price reports on farm products, or turn to his daily newspaper and read the price of Choice cattle in Chicago.

After all, we've had a market news service in this country for more than a half century—a service provided by the U.S. Department of Agriculture in cooperation with State departments

But this isn't true elsewhere in the world.

Take Latin America, for example. I've just returned from nearly five years in Brazil and other South American countries, where I was helping them develop a market news system. Before I went to Brazil in 1964, I had nearly 40 years of service with USDA, most of that time in market news.

When I went to Brazil, there was

only an embryonic market news service in that country: two of the nation's 22 States and three territories had a little market news work going on. But there was no regular exchange of market information between the principal markets, no national market news service at all, and the individual farmer couldn't get the information he needed to make a decision about when or where to go to market.

To be effective, a market news service should provide up-to-the-minute information on prices of products, on how much product there is, and on how rapidly the supplies are being sold. This information should be given to the farmers and traders as soon as possible, and it should cover all the markets near the producer.

This kind of market news service is what we set out to give the farmers of Brazil.

It took us some time before we

could get a national program started. First we had to plan the type of service it would be. We had to hire the necessary personnel, train them, set up office space for them, and buy the equipment necessary to run a modern market news program. We also had to get the funds to run such a program. Initially, financing was shared by the Brazilian Ministry of Agriculture and the U.S. Agency for International Development.

We had other problems. What terms do you use?

In this country we have very specific terminology for our reports, terms that are recognized by most American farmers. But in Brazil the illiteracy rate is high, and many of the farmers can't read or write.

It was obvious that we couldn't just "import" American terminology—we had to use words that the Brazilian farmer could understand.

of agriculture.

By Lance Hooks

In this country we speak of fed cattle and range cattle, and we trade on cattle by USDA grade—Prime, Choice, Good, and so on. In Brazil such terms are meaningless. They sell their cattle as "fat" (engorde) or as "skinny" (emagre), so these were the terms we used in market news reports.

They also frequently sell their cattle by the head in Brazil. When they do sell by weight, they'll sell by arroba (about 33 pounds). The method of selling had to be reflected in our reports.

Soon we were ready to start our new service. In April 1966, the first national market news service in Brazil was inaugurated by Ney Braga, Brazilian Minister of Agriculture at that time. It covered three of Brazil's largest wholesale markets, Rio de Janeiro, São Paulo, and Belo Horizonte.

The service caught on fast. Producers were quick to realize the bene-

fits of having current market information available to them—particularly when local buyers tried to buy from them at prices far below the going market price.

In cooperation with Brazilian state agriculture secretaries, new offices were soon opened in Caritiba and Rio Grande Sul. Later the service was extended to Recife in Brazil's northeast and in Fortaleza, Ceara, and Salvador in Bahia State.

One of our most severe problems was the absence of trained personnel to operate the program. Here we drew on the experience of USDA, and sent more than 40 Brazilian officials (both federal and state) to the U.S. to study how we operate the market news program in this country. They studied Federal-State operations, visited the modern markets of America, and learned how marketing and market reporting is done.

But my work wasn't confined to Brazil. I spent a month in Peru in 1968 to help them set up a similar service. Here I was able to draw on what I had learned in helping to set up the Brazilian system.

When I went to Peru, they were already gathering market information on the Lima market. But they weren't distributing it until the next week, when they sent out a mimeographed report. This wasn't giving the Peruvian farmers enough timely information to do them much good.

After I consulted with officials



there, they started daily reporting of market news and they opened up offices in the interior for more wide-spread dissemination of this information. Now they have offices in 11 cities and are putting in a teletype service (similar to the ones in the U.S. and Brazil) to speed up information between their own offices.

I did much the same sort of work in the small (700,000 inhabitants) country of Guyana in 1969. They were in much the same boat as Peru (gathering information but not releasing it until the next week, when it was of no current value to producers), but they now have a fivertimes-a-week radio program giving this information immediately to the farmers who need it.

The author is a public information specialist, Information Division, C&MS, USDA.

And the latest market news work I've done in Latin America (and possibly the most far-reaching of all) is consultation with the most progressive of these countries in setting up a trans-American market news network to allow free interchange of information between these nations.

I met with marketing leaders from 14 Central and South American countries in Lima, Peru, last year at a technical conference sponsored by the Food and Agriculture Organization. We discussed the establishment of market news services, and a direct link-up—preferably by teletype—between the major Latin American nations.

This new approach to international market news looks promising. Brazil and Peru have been exchanging market information by air pouch for more than a year, and other countries are planning to join them soon.

As you can see, we really shouldn't take market news for granted. When you've seen the struggling birth of market news in countries without it—when you've seen the farmers of Latin America welcome even the most primitive of market news systems—and when you've seen how valuable such a system can be to the marketing system of a developing nation—then you realize how lucky we are in the U.S. to have the world's best market news system.



By David K. Hallet

BEN FRANKLIN DID IT with a key.
Marie Curie used radium and
Eli Whitney cotton seeds. For
Tom Edison it was electricity and
George Washington Carver tried it
with peanuts and sweet potatoes.

A key . . . a peanut . . . a light bulb . . . cotton—all experiments separated by vast differences of purpose and means, yet all overwhelmingly alike in the human desire to satisfy the need for progress.

Recognizing a need affecting both the producers and consumers of meat, the Livestock Division of the U.S. Department of Agriculture's Consumer and Marketing Service is setting up an experiment of its own. At this time, in fact, the Division is just entering the first stages of its unique "scientific method":

 Observation—Feeder calf producers and feedlot operators need and have requested a means to receive information detailing the characteristics of their animals after slaughter.

 Analysis—Why does the producer want carcass data feedback—what are his considerations? "About 77% of all graded meat is USDA Choice. How do my steers grade?"

"I know the feeders want fast, efficient gainers and I think my calves rate with the best—but how exactly are they doing after they leave me?"

And what of the feeder—what goes on in his mind?

"The housewife doesn't want to trim much fat off the meat she buys, considers it money wasted.

"Yet everyone wants enough marbling in meat to bring out its flavor and tenderness, with a minimum of outside fat covering. How does my production program rate? Is it yielding high-quality, thickly muscled steers? Will the carcasses hit the Yield Grade 2, Quality Grade Choice target that I'm aiming at?"

• Hypothesis—That the "eartag project," or Beef Carcass Data Service, a pilot program recently initiated by the Livestock Division, can trace a steer's development and relay the allimportant carcass information back to the producer and feedlot operator.

From Texas producer to the winter

wheat pastures of the Kansas range, and on to the Iowa or more distant slaughterhouse and packing plant—both figuratively and geographically, the distance between the Texas-produced calf and the slaughterhouse is great. Unfortunately, this distance has traditionally meant a communication gap between producer, feeder and packer.

The ear-tag project is designed to close this gap and provide an orderly flow of significant information that will relate carcass data back to the producer or feeder.

And that data will be complete. Quality data will include conformation, maturity and marbling factors, and yield data will detail the carcass' fat thickness, ribeye area, and kidney, pelvic and heart fat.

For the past 6 years, producers and feeders have had the use of the effective, but limited, Beef Carcass Evaluation Service. This service is the forerunner of the experimental Beef Carcass Data Service. The Livestock Division began the Evaluation Service to provide producers and feedlot operators with carcass data on quality and yield grade factors that they might channel into beneficial genetic and feeding programs.

It wasn't quite that easy, however. The procedure involved was cumbersome. The producer or feeder was obliged to make time-consuming arrangements with the packer and meat grader, and the combination of these restricting factors was discouraging.

The password to the new Beef Carcass Data Service?

Convenience!

The Evaluation Service required the person desiring the information to make special arrangements with the packer. Now the bright orange USDA ear tag of the new project will automatically alert the packer to an individual carcass.

The producer or feeder need only purchase the official ear tags and attach one to each animal he wants identified for the data service.

Where the individual marked his cattle with his personal identification in the older program, the Data Service requires USDA's own ear tags. Chances of loss or confusion are greatly minimized as a result, especially in the transfer of these uniform

tags from live animal to carcass. (Unfortunately, purchase of an ear tag does not in itself guarantee that data will be received for each animal identified. Some tags may be lost or removed in marketing channels by someone unaware of their purpose.)

Formerly, the producer or feeder was responsible for informing the grader of the date, time of slaughter, and means of carcass identification. Under the ear-tag project, USDA will take over automatically when the tagged animal reaches the slaughter-house.

During slaughter, the Government meat inspector will remove the orange tag from the steer's ear, attach it to the carcass, and notify the local USDA meat grader. He in turn will record the carcass data on quality and yield, along with the tag number, and forward this information to a data clearing house, which will mail it to the tag owner.

The test period is designed to answer several questions. What will it cost to provide this service? How many ear tags will be lost? What other problems will be encountered? The answers to these and other questions should determine whether this new concept is useful and necessary and can be provided at a reasonable cost.

• Conclusion — Every experiment makes someone's life a little easier—in this case, it's you! If the various ear-tag projects now underway prove successful, the program may end its experimental days with the conclusion that its benefits make it practical and worthwhile for everyone.

For you, the feeder calf producer, the project can mean valuable carcass information reflecting the breeding characteristics of your sires and dams. It could mean the opportunity to understand the hereditary qualities sought by feeders and to improve your stock accordingly.

For you, the feeder, the ear-tag project can offer a solid base of carcass information on which to develop your stocking and feeding programs.

And for you, the consumer, the Beef Carcass Data Service can mean more of what you want in beef!

The author is Assistant Chief, Meat Grading Branch, Livestock Division, C&MS, USDA.

Tomato Chart gives clues to Ripeness

Breaker, Turning, Pink, light red —do these color classifications for tomatoes mean the same to wholesaler and shipper?

The color classifications are described in the U.S. Standards for Grades of Fresh Tomatoes established by the Consumer and Marketing Service of the U.S. Department of Agriculture. And USDA color photographs, used by Federal and Federal-State inspectors as visual aids in grading tomatoes, show precisely what is meant.

Now tomato shippers, wholesalers, and others can have a handy visual aid too. The Tomato Color Chart, published by the United Fresh Fruit and Vegetable Association, with the cooperation of C&MS' Fruit and Vegetable Division, reproduces the USDA color photographs, and gives official descriptions, for breaker, turning, pink, and light red. The chart is designed to help prevent misunderstandings about the stage of ripeness of tomatoes being traded.

You can obtain copies of the chart (\$1 each for five or less; 75 cents each for six or more) from UFFVA, 777 14th St., N.W., Washington, D.C. 20005. The charts are not available from USDA.

Shopping Tips from the Experts

You stand in front of the meat counter trying to decide.

The store has a "special" on those delectable USDA Choice rib roasts: 99¢ a pound for the 7-inch cut, \$1.19 a pound for the 5-inch cut.

Which to buy to get the better bar-

gain?

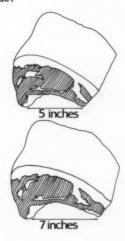
Here's what a U.S. Department of Agriculture meat expert does when he buys a rib roast for his family. He's W. Edmund Tyler, Chief of the Standardization Branch, Livestock Division, of USDA's Consumer and Marketing Service.

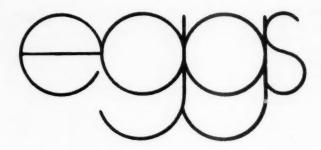
"I figure how many slices of meat I want to serve from the roast—in other words, how thick a roast I want to buy. I pick out both a 5-inch cut and a 7-inch cut of that thickness. Then I compare the total cost of each roast—and buy the cheaper."

Tyler explains that the 7-inch cut contains very little more lean meat than the 5-inch cut—and because it has longer bones and more waste fat than the 5-inch cut, it sells for less per pound.

Since the rib-eye makes up the major part of the roast, you're going to get just about the same number of servings from either a 5-inch or a 7-inch roast if they're the same thickness.

What's a 5-inch or a 7-inch rib roast? Here's how the measurement is made:





REATURES OF HABIT — that's what we are. We live by routines, a whole series of them upon which we rely, however unconsciously, to perform the mechanical functions necessary in getting through the day.

No doubt you've found yourself dropping an item into your grocery cart which you neither needed, nor perhaps wanted, simply because you'd grown accustomed to buying it. More often, a shopping routine may cause you to overlook an important bit of information on a label, an omission which can cost you quality in the supermarket.

The last time you bought eggs, for example, you probably checked the size and grade on the carton. But did you notice whether the carton bore

the U.S. Department of Agriculture grade shield? That shield verifies the carton statement of grade and size, and it is a reliable assurance of quality.

To bear the USDA shield, eggs must be graded according to Federal standards of interior quality and shell appearance and condition. There are three grades: U.S. Grade AA, A, and B. The grade you will find most often is Grade A.

A U.S. Grade AA (or Fresh Fancy) egg stands high in the pan and covers only a small area when broken out, while a Grade A egg covers a moderate area. Both the AA and A quality eggs have a round, firm yolk and a thick white. The U.S. Grade B egg, which may cover a wider area when broken out, may have a small amount of thick white and a yolk that is somewhat flattened and enlarged.

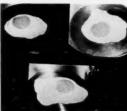
Before they can be sold with a USDA grade mark, eggs must also be classed by size. In many plants, sizing is accomplished by automatic weighing equipment which diverts the various-sized eggs into separate bins for packaging. Graders also spot-check eggs for size on individual egg scales.

The voluntary Federal-State grading service, administered by USDA's Consumer and Marketing Service, is intended to assure consumers of the quality and size of eggs. The service, however, can be only as effective as consumers' knowledge of it. To further this knowledge and encourage shoppers to look for the USDA shield, C&MS has prepared a slide set, entitled "How to Buy Eggs," for use as an instructional aid. The photographs appearing with this article are taken from the set.

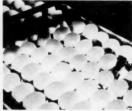
The slide set, which is also available in filmstrip form, discusses the grading process, quality and size, and suggests some of the many uses to which eggs may be put in cooking, baking and the preparation of salads and other dishes.

Copies of the set, with accompanying narrative guide, may be purchased for \$8.00 from Photography Division. Office of Information, U.S. Department of Agriculture, Washington, D.C. 20250. The filmstrip is available for \$5.50 from Photo Lab, Inc., 3825 Georgia Ave. N.W., Washington, D.C. 20011.

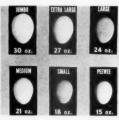




and A, top, are good for all ning" or "flash candling." dozen. For example, a dozen purposes where appearance Graders observe eggs over high-large eggs would weigh at least in general cooking and baking, that do not meet standards, difference between the sizes,



Fried eggs show differences be- Most eggs are checked for in- USDA sizes or weight classes, Remember that quality and





tween egg qualities. Grade AA terior quality by "mass scan- showing minimum weight per size are not related. For example, a U.S. Grade A egg would be Large, Medium, or any size. counts. Grade B eggs are good intensity lights, removing any 24 ounces. There is a 3-ounce The grade depends on quality of the egg, not on size.



By Richard O. Myers

To someone says "Peach," what do you think of? A tasty fruit ... a delicious pie ... that favorite jelly or preserve ... a fresh fruit salad ... pickles ... garnish for that special dish ... a pretty girl? Whatever your answer, you'd have to agree that the peach is a delight.

Behind that crimson-gold exterior is a long and interesting history. "Persian apples," as they were once called, originally came to Europe from China, traveling over caravan routes through Persia. Early American colonists brought the peach to this country.

Peaches are grown in many parts of the United States where the winters are not too cold, yet cold enough to provide a dormant period. Along the East Coast, from Georgia to Massachusetts, in the Great Lakes region of New York, Ohio, and Michigan, and along the West Coast, particularly in California where a large volume of peaches are grown for canning and freezing, you see many peach orchards.

The journey of the fresh peach to you starts with harvest in the orchards.

When the "ground color"—the basic green to yellow color minus the "blush"—is right, the peaches are picked carefully by hand, for they can be bruised and damaged easily. The pickers put the fruit into field containers, which are hauled by tractor or truck to the packinghouse.

Unloaded from the containers onto conveyor belts, the peaches are on their way! First, some preliminary sorting to remove any undersized and damaged fruit and then on to washing and defuzzing machines. Here, rotating brushes loosen the fuzz and clean the fruit. Washing and defuzzing improves appearance and makes sorting of the fruit into quality grades easier.

Proper sorting for quality (grade) is an important and exacting operation in which any damaged, diseased, and decayed peaches are removed.

After grading the peaches pass through a sizing machine. A machine commonly used consists of rollers of progressively smaller diameter with a moving spring belt underneath. The sizing units are sloped, using gravity to move the fruit along the rollers. As the peaches reach the point when the space between the rollers is equal to their diameter, they fall into their proper size group, and a conveyor belt carries them to the packing stations.

The shipping package depends on the market to be served and how the peaches are going to be transported—by truck, train, or plane; the distance they must travel—to the local market or a city far away; their destination—a large supermarket chain or small food market; and the equipment and labor available. So into the familiar crate, basket or carton, the peaches go.

In many packinghouses Federal-State inspectors examine the fruit for quality and condition and certify it on the basis of U.S. grades. Federal-State inspection is a voluntary service provided on a fee-for-service basis under cooperative agreements between the Fruit and Vegetable Division of the U.S. Department of Agriculture's Consumer and Marketing Service and State agencies.

To help retard decay, peaches, warm from the orchards, are given an icy bath or shower in a hydrocooler (a machine which immerses or sprays the fruit with cold water and a chemical decay inhibitor) before their journey to market. Hydrocooling may be done either before or after the peaches are packed.

These cooled peaches travel cool in truck trailers, railroad cars, or piggyback trailers that are refrigerated to slow ripening and retard decay. Their destination now is the retail stores, and then into your menu plans.

The fresh peach was the mark of a high-fashion dinner in England during the time of Queen Victoria. And no wonder! They cost a guinea each (about five dollars). Fresh peaches are much more reasonable today and you'll find them at the food store from May to mid-October. So the next time you have a "high-fashion" dinner, or maybe just an informal snack, why not serve a peach!

The author is a marketing specialist, Standardization Section, Fresh Products Standardization and Inspection Branch, Fruit and Vegetable Division, C&MS, USDA.

part 3 of 3 parts a Statistician Looks at Sampling Plans

By Richard P. Bartlett, Jr.

Every YEAR FEDERAL AND Federal-State graders grade more than half a trillion pounds of food and farm products, including most of the beef, lamb, grain, frozen fruits and vegetables, cotton, and to-bacco produced.

This massive task—carried out by only a few thousand graders—simply couldn't be done if every item graded had to be examined individually. This is why sampling plans, scientific means of drawing samples, are important.

This use of modern sampling plans in grading is another way the U.S. Department of Agriculture is working to improve its services.

The grader's task is to compare the product he is grading with the official USDA standards, and apply the grade which describes that product's quality. For meat, the grader actually looks at every carcass. But for many other products (like canned vegetables which must be opened to be graded or grain which is shipped by the ton) the grader must rely on a small sample.

If a sample is used, it must give a reasonably true picture of the entire lot being graded. To do this it should

- Large enough to be statistically representative, so you can draw a conclusion that could apply to the total lot.
- Not so large that you waste time and product. When you open a can of tomatoes to grade it, the can is wasted. Obviously, in this case, you want a sample no larger than necessary. Also, in sampling it is possible to reach a point of diminishing value. If a grader can get the same results from a sample of 20 cans as from 30, he's wasting his time as well as the product by drawing the larger sample.
 - · A form of random selection. Every

item in the lot should have a chance of being put in the sample. If the sample were simply drawn from the top of the pile or from the batch nearest the doorway, we might happen on a cluster of very good or very bad items. Also, if we always chose our sample from the same position, the seller (or anyone who wanted to insure a good grade) could place the better product there and get the lot graded higher than it should be.

Statisticians have worked with graders to establish definite rules that can help make sure all samples are drawn properly. We also provide tables of random numbers and other devices that graders can use for drawing samples.

To help determine the proper size of samples, however, we use our knowledge of probability theory. The sampling plan to be used for any job will depend on the degree of accuracy we seek—and the accuracy of a sampling plan depends on two very complicated concepts: the AQL and the sampling risk or error.

"AQL" is a statistician's abbrevia-

tion of "acceptable quality level," which very simply means the number of defects we'll accept in any lot and still consider the lot to be of good quality.

The AQL is the maximum number of defects acceptable per hundred units in any lot.

But this is not the only factor to be considered in developing a sampling plan. We must also consider the amount of error involved in any sample. No sample can ever be exactly typical of the original lot. If you draw a sample from a lot with many defects, you probably will get many defects in the sample. But there is always the possibility (however slim) that you'll get a sample with considerably fewer defects than might be expected based on the many defects in the lot. Similarly, a sample drawn from a good lot just might contain a majority of the defects in the lot.

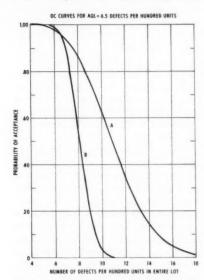
If what should be an acceptable lot is rejected or downgraded because the sample contains a majority of the defects in the lot, we have what we call a "Type I" error, or "seller's risk." If an unacceptable lot is given a higher grade than it should have, because the sample contains considerably fewer defects proportionally than the lot, we call this a "Type II" error, or "buyer's risk."

We can see the extent of these errors by plotting the probability of accepting or rejecting a lot in graph form. The line on the graph that shows the extent of errors (or risks) is known as the OC (Operating Characteristic) curve and this OC curve is what we use to determine what

sampling plan we'll need.

Let's take a look at a couple of OC curves to get an idea of how they work. This graph describes the accuracy of two different sampling plans, both based on an AQL of 6.5 (we want no more than 6.5 defects per hundred units in these lots.)

Sampling plan A is plotted on the OC curve at right. It's based on a small sample—126 units—and the



plan calls for rejecting the lot if more than 13 defects are found. This number 13 is called the "acceptance number" for sampling plan A. Plan B uses a larger sample (800 units) and has an acceptance number of 64. The lot will be rejected if more than 64 defects are found. The OC curve for plan B is on the left.

We can measure the effectiveness of these sampling plans by finding out the amount of risk involved in each plan to both buyer and seller.

The two curves on this chart meet at .96. This means that if the lot from which the samples were drawn actually had 6.5 defects per hundred, it would have a 96 percent chance of being accepted with either plan. The seller's risk in both cases is only 4 percent.

We can determine the buyer's risk

the same way. Suppose the lot really had 10 defects per hundred units. Notice where each curve crosses the 10.0 vertical line. Plan A crosses this line at .62, meaning that a lot with 10 defects per hundred units would have a 62 percent chance of being accepted by this plan—a very poor risk for the buyer.

But Plan B provides a better buyer's risk: it gives only a 3 percent chance of acceptance if the lot has 10 defects per hundred.

The sampling plan that would be used would depend on a number of considerations based on the OC curves:

 The cost of sampling itself. The larger the sample size, the more expensive it is. Plan B would cost much more than plan A. If the decrease in risk weren't worth the added cost to get it, you might have to use the smaller sampling size.

 The general quality of the product. If by experience you know that lots from a certain source tend to be of high quality, you could choose a smaller sample size (like plan A) and still be fairly certain of good quality.

 The risk you would be willing to take. A conscientious manager would probably insist on the best sampling plan (i.e. with the least risk) at the most reasonable cost.

In summary, we determine the sampling plan we want to follow by deciding first on the level of quality we will accept (the AQL) and then on the level of risk (on the OG curve) we want. In grading programs, the AQL and risk are decided by the grade standards and predetermined sample size. But for other quality control programs, plant managers make these decisions on the basis of cost and value considerations.

This method of measuring the effectiveness of sampling plans is ideally suited to the new "attributes" grading system (explained in Part 2 of this series of articles, AGRICULTURAL MARKETING, Feb. 1970) in which the grader merely counts the number of defects (the number of departures from best quality) to assign a grade. In attribute grading, the grade standards themselves determine the AQL, and dictate the sampling plans to be used.

This whole field is much too complicated to explain entirely in such short space. But it is a field that's becoming increasingly important in grading and standardization.

Where the statistician can contribute most in this complex marketing system is in introducing useful, modern tools where they can be most effectively used, and in helping to make these tools work toward more accuracy and economy in existing programs. Statistical sampling plans and attribute standards are the newest tools in this field, and will become more important in the years ahead.

The author is Director, C&MS Statistical Staff, C&MS, USDA.

To SUCCEED IN THE fast-moving produce industry, a broker must be honest, reliable and resource-ful. He performs an essential service in the marketing of produce by bringing buyers and sellers together and by negotiating valid and binding contracts.

In order to draw up a valid contract, a broker must have a sound knowledge of contract law and he must be fully familiar with the Perishable Agricultural Commodities Act. He must be aware of the constantly changing marketing conditions for fruits and vegetables and the factors affecting the supply of these highly perishable products, such as unfavorable weather and shortages of trucks or rail cars.

The PAC Act is a fair trading law for the produce industry. It is a code of good business conduct and requires brokers and other traders in fresh or frozen fruits and vegetables to be licensed.

The duties and responsibilities of produce brokers are explained in detail in the PAC Act and the regulations issued under the act, available in a pamphlet from the Regulatory Branch, Fruit and Vegetable Division, Consumer and Marketing Service, U.S. Department of Agriculture, Washington, D.C. 20250.

In negotiating contracts, brokers have to inform both parties of all the terms and conditions of the contract, and when everybody agrees, the broker must prepare a written confirmation or memorandum of sale describing the main points of the contract. He must promptly deliver it to both parties and keep a copy for his files.

If either party notifies the broker that he does not agree with the terms of the memorandum, there may be no contract. The broker should consult with the parties, make necessary corrections or changes immediately, and send a revised memo to both parties.

It is important for a broker to exercise care in preparing proper memorandums of sale. The PAC Act requires brokers to prepare and maintain complete records on all their transactions. Also, if the broker can-

the man in the middle!



By John J. Dimond

not prove that he made a valid contract, a reparation complaint could be filed against him for any damages suffered by either party to the contract as a result of his negligence.

The broker is not permitted to grant allowances or to adjust an invoice price without specific authority. A broker should request that the seller confirm any changes in writing in order to avoid later disputes. If a seller later denies that he authorized any changes in the contract, the broker may end up paying the amount of allowances he granted.

When he has done his job, a broker can charge only one fee. Sometimes the buyer and the seller agree to split the fee. If a broker requests or accepts a full fee from both parties, he is violating the act. However, he is not responsible for any breach of contract committed by the buyer or the seller.

In addition to their basic duties, brokers perform other services for their customers.

Usually the seller sends his invoice directly to the buyer. However, the broker may agree to assist the seller by billing the buyer, collecting the funds and remitting to the seller.

This agreement, however, is not a guarantee by the broker that he will pay the seller if the buyer does not. There must be a specific agreement that the broker will guarantee payment by the buyer before the broker can be held liable.

Whenever a dispute arises after a shipment of produce arrives, the broker should promptly notify the seller, but he is not obligated to do anything more. However, most brokers attempt to arrange a settlement between the parties.

If either party later files a complaint under the Act or a claim against the carrier, the broker should furnish information available in his records which will be helpful.

Any broker who also operates as a dealer—that is, who buys and sells produce in addition to his brokerage operation—has to make his status clear in each transaction. It is not enough for a broker to give general notice that he operates in more than one capacity. He must give notice in each transaction.

If a person represents himself as a broker, when he is actually buying or selling produce for himself, he is violating the PAC Act and, obviously, is not entitled to a brokerage fee.

When questions arise over shipments of produce, brokers should be most careful about advising customers on their rights and liabilities. Incorrect advice may merely complicate the problems further. Brokers, or any other persons in the produce industry, can get expert opinions from the nearest PACA office by telephone, wire, or mail.

The author is Chief, Regulatory Branch, Fruit and Vegetable Division C&MS, USDA.



E opened the door for some significant changes in the All-American hot dog.

Consumers can now be sure that the fat content of federally inspected hot dogs will be limited to 30 percent. That's one change in frankfurters and other cooked sausages made by the U.S. Department of Agriculture to halt the annually increasing fat level in these products.

Another USDA decision permits limited amounts of poultry meat in hot dogs without a change in the product name.

Under the new regulation, plain "hot dogs" or "frankfurters" can contain up to 15 percent poultry, if it is included in the ingredient statement on the label. A hot dog or frankfurter tabbed "all meat" can also contain up to 15 percent poultry meat, but in this case poultry fat and skin is banned. The addition of more than 15 percent poultry would require a change in the product's name, such as "chicken-furter" or "hot dog with chicken added."

USDA's Consumer and Marketing Service is the agency charged with overseeing the inspection, composition and proper labeling of meat and meat products. This includes surveillance over the fat content of the more than 1.5 billion pounds of hot dogs consumed annually.

Surveillance such as this usually falls on the seven regional laboratories which C&MS maintains to handle routine testing work in its meat inspection program. These laboratories have the equipment and talent to conduct complete analyses on meat products from federally inspected plants. The tests range from protein and fat level evaluations to determination of pesticide or feed additive residues in the products.

Because of the increased workload, C&MS certified commercial laboratories, many of them in the meat plants themselves, as qualified to conduct the fat tests. By testing periodic duplicate samples and comparing results, the C&MS laboratories monitor the accuracy of their commercial counterparts. Meat packers pay the cost of the sample testing in these commercial facilities.

When the program is fully operational, over 100 laboratories will be certified to handle the tests for fat content as well as other checks for moisture and protein. Upon detecting a frank which exceeds the fat limit, the laboratory will notify inspectors in the plant who are authorized to detain the plant's entire cooked sausage output to determine the extent of the violation. Hot dogs with more than the permitted amount of fat are denied the Federal inspection mark and cannot move in interstate com-

merce

Several people have asked questions about the "all meat" frank label. For example, they ask whether a product should be called "all meat" if it contains added water and corn syrup.

Dr. G. H. Wise, a C&MS Deputy Administrator and the man in charge of the agency's consumer protection programs, answers like this: Corn syrup helps sweeten the taste of a hot dog, provides consistency for the blend of ingredients and facilitates the removal of artificial casings which packers use to shape the products. Water, Dr. Wise says, is added in the form of ice to keep the ingredients cool during preparation and also to provide consistency in the blend.

Dr. Wise emphasizes that the Federal meat inspection regulations include strict limits, enforced by the inspectors, on the amount of water and corn syrup which may be added to an "all meat" frank or any other frank and on the amount of non-fat dry milk or other extender which may be added to a plain frankfurter.

Moreover, Dr. Wise points out, a chemical analysis of the most expensive meat cuts would show about 60 percent water, about 25 percent fat, and the remainder comprised of protein and minor components.

The hot dog still reigns as a nationwide favorite, a good deal leaner than it seemed destined to become. OFFICIAL BUSINESS
PENALTY FOR PRIVATE USE, \$300

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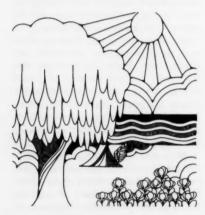
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COVER STORY

Donated foods help campers enjoy good food as well as sunshine this summer. Page 2. CLIFFORD M. HARDIN Secretary of Agriculture

ROY W. LENNARTSON, Administrator Consumer and Marketing Service

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